

Docket No.: 266110US0X PCT

OBLON
SPIVAK
MCCLELLAND
MAIER

NEUSTADT P.C.

ATTORNEYS AT LAW

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 10/525,941

Applicants: Ulrike LICHT, et al. Filing Date: February 28, 2005

For: HYBRID DISPERSIONS COMPRISING

POLYADDUCTS AND FREE-RADICAL ADDITION

POLYMERS
Group Art Unit: 1714
Examiner: Niland

SIR:

Attached hereto for filing are the following papers:

Appeal Brief

Our credit card payment form in the amount of \$500.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND

MAIER & NEUSTADT, P.C Norman F. Oblon

Charles A. Wendel

Registration No. 24,453

Customer Number

22850

(703) 413-3000 (phone) (703) 413-2220 (fax)



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF : CONFIRMATION NO. 2567

ULRIKE LICHT, ET AL. : EXAMINER: PATRICK D. NILAND

SERIAL NO: 10/525,941

FILED: FEBRUARY 28, 2005 : GROUP ART UNIT: 1714

FOR: HYBRID DISPERSIONS

COMPRISING POLYADDUCTS AND FREE-RADICAL ADDITION POLYMERS

BRIEF ON APPEAL

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

This is an appeal from the Final Rejection mailed July 31, 2006.

I. REAL PARTY IN INTEREST

The real parties in interest are BASF Aktiengesellschaft of Ludwigshafen, Germany, and the Max-Planck-Gesellschaft zur Foerderung der Wissenschaften of Munich, Germany, whose ownership interests are indicated in an assignment recorded October 3, 2005 at Reel 017053 Frame 0289.

09/27/2006 SDENBOB1 00000012 10525941 01 FC:1402 500.00 OP Application No. 10/525, 41
Appeal Brief

II. REPARED APPEALS AND INTERFERENCES

There is no application, patent, appeal or interference or judicial proceeding known to Appellants, the Appellants' legal representative, or the assignees that may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF THE CLAIMS

The application was filed with 19 claims. A Preliminary Amendment accompanying the filing of the application on February 28, 2005 amended Claims 2-8 and 10-19 and added Claims 20 and 21. An Amendment And Request For Reconsideration filed February 6, 2006, amended Claims 1-4 and 7-9, and added new Claims 22-24. An Amendment filed July 18, 2006 in reply to the final rejection directed the cancellation of Claims 1-8 and 18-24.

IV. STATUS OF AMENDMENTS

The Advisory Action mailed July 31, 2006 indicated that the Amendment filed July 18, 2006 would be entered for purposes of appeal. Thus, the claims before the Board for consideration in this case are Claims 9-17 appearing in the attached Claims Appendix.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The claims on appeal are directed to a process for preparing a hybrid dispersion containing polyadducts and free-radical addition polymers by initially emulsifying a monomer mixture comprising the monomers of the polyadduct and the monomers of the free-radical addition polymer with water and then conducting a polyaddition to prepare the polyadducts and a free-radical addition polymerization to prepare the polymers, wherein the monomer mixture is emulsified in water before 40% by weight of the monomers of the

polyadduct have reacted to form the polyadduct. See page 1, lines 5-12, and page 2, lines 27-38, of the specification.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

There is but one ground of rejection before the Board in this appeal. The rejection is under the first paragraph of 35 U.S.C. § 112 and relates to the phrase "by weight" in Claim 9.

The Final Rejection mailed April 19, 2006 included the following comments on page 2 under 2.A. "The instant claims recite 'by weight' regarding the percentages of the instant Claims 1, 3, 4, 7, and 9. There is not basis seen for the recitation of 'by weight'. Pages 18 and 19 are not seen as the instant specification ends at page 16. The examples are not commensurate in scope with the instant claims and therefore do not provide basis for the entire scope of the instant claims." All pending claims had been rejected under the first paragraph of 35 U.S.C. § 112 for this and other reasons.

The Advisory Action mailed July 31, 2006 indicated that the Amendment filed July 18, 2006 had overcome a new matter rejection at paragraph 2.B. but that the rejection in paragraph 2.A. (appearing above) had not been overcome. The Examiner stated "The examples do not establish that the percentage range of the instant claim 9 of issue was based on 'weight' and it might have easily been by moles or some other percentage basis."

VII. ARGUMENT

The specification supports the use of "by weight" as a basis designator here and the claims comply with the written description requirement of the first paragraph of 35 U.S.C. § 112.

The claimed process involves controlling reaction conditions such that the monomer mixture containing monomers of the polyadduct and monomers of the free-radical addition

polymer is emulsified in water before 40% of the monomers of the polyadduct have reacted to form the polyadduct. Appellants say that logic dictates that the percentage determination would be on a by weight basis.

The working examples show addition of all additives by weight and the specification includes reference to a weight percent basis in other portions thereof; see, for example, page 8, line 47 (proportion of polyadducts to sum of polyadducts and free-radical additive polymers), page 9, line 18 (amount of principal monomer in free-radical addition polymer), page 12, line 7 (amount of surface-active substance), and page 13, line 8 (amount of initiators).

Moreover, a person skilled in the art would presume that the percentage is in weight percent as weight percent is easy to determine from the total weight of the monomers respectively, from the weight of the polyadduct already formed. In contrast, mole percent would require a detailed analysis of the kind of monomers that have already polymerized. An artisan would readily think of weight percent in the context of the present invention.

In the invention, the monomers are emulsified in water before 40% of the monomers of the polyadduct have already reacted to form the polyadduct, preferably before 20%, 10%, 5% or even 1% have reacted; see the specification at page 2, lines 27-38. In the most preferred aspect, the emulsification is taking place before any monomers have already reacted as shown in the working examples. The weight percent in the claims is a number to assure that the monomers are still monomers and have not yet reacted completely before emulsification is complete. The specification supports a weight % basis.

VIII. CONCLUSION

The claims comply with the first paragraph of 35 U.S.C. § 112. The Board is asked to reverse the rejection and so hold.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,

MAIER & NEUSTADT, P.C.

Norman F. Oblon

Customer Number

22850

Tel: (703) 413-3000 Fax: (703) 413 -2220 (OSMMN 03/06)

NFO:CAW\rle

Charles A. Wendel

Registration No. 24,453



Claim 9: A process for preparing a hybrid dispersion comprising polyadducts and free-radical addition polymers, which comprises:

first emulsifying a monomer mixture comprising the monomers of the polyadduct and the monomers of the polymer with water, and then

conducting a polyaddition to prepare the polyadducts and a free-radical addition polymerization to prepare the polymers,

wherein the monomer mixture is emulsified in water before 40% by weight of the monomers of the polyadduct have reacted to form the polyadduct.

Claim 10: The process as claimed in claim 9, wherein the polyaddition and the free-radical addition polymerization are conducted at the same time.

Claim 11: The process as claimed in claim 9, wherein first the polyaddition and then the free-radical addition polymerization is conducted.

Claim 12: The process as claimed in claim 9, wherein first the free-radical addition polymerization and then the polyaddition is conducted.

Claim 13: The process as claimed in claim 9, conducted in a miniemulsion generated by means of ultrasound or by means of a nozzle jet emulsifier.

Claim 14: The process as claimed in claim 9, wherein the free-radical addition polymerization is conducted at temperatures of from 20 to 150°C.

Application No. 10/525,941 Appeal Brief

Claim 15: The process as claimed in claim 9, wherein the polyaddition is conducted at temperatures from 30 to 120°C.

Claim 16: The process as claimed in claim 9, wherein the free-radical addition polymerization or the polyaddition is performed under superatmospheric pressure.

Claim 17: The process as claimed in claim 9, wherein the addition polymerization is conducted with induction by radiation.

RELATED PROCEEDINGS APPENDIX

N/A

EVIDENCE APPENDIX

N/A